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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,703

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Mark Depietro

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Motorola, Inc.

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EXAMINER

FEATHERSTONE, MARK D

ART UNIT

PAPER NUMBER

2423

NOTIFICATION DATE

DELIVERY MODE

04/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/777,703	<b>Applicant(s)</b> DEPIETRO ET AL.	
	<b>Examiner</b> MARK D. FEATHERSTONE	<b>Art Unit</b> 2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Amendment***

Response to amendment filed 10/06/2008. Claims 1 and 3 have been amended. Claims 1-3, 5-14, and 16-22 are pending.

### ***Response to Arguments***

Applicant's arguments filed 02/13/2009 have been fully considered but they are not persuasive. With respect to the rejection of independent claims 1, 3, and 12, applicant argues that the combination of Birks in view of Krisbergh in view of Elcock fails to teach the limitation "determining whether the command is directed to an augmentation unit further upstream. Examiner disagrees. As discussed in the office action dated 11/13/2008 (pages 3-4), Krisbergh discloses a user sending a command for information to an upstream server, which will direct the command to an ISP (Internet Service Provider corresponding to a server) upstream if the command is directed to information that is distributed by the ISP (Figure 1, Settop converter 54 communicates with cable headend 34 which communicates with ISP 60). Applicant argues that the combination of references does not teach the determining step of determining whether to send the command to the upstream ISP. Krisbergh specifically teaches this step in column 6, lines 22-46, in which Krisbergh clearly states "one skilled in the art would recognize that not all commands need be forwarded to the information source 60. For example, if requested information is already available in the application server 68 (fig. 3, application server resident at the headend 38)....the

information source 60 need not be communicated with to procure the requested information. Likewise, if the command is a message from a first terminal 54 to a second terminal 54 by the way of headend server 38, no communication need be had with the information source 60)". Clearly, the headend server is determining if the command can be handled locally, or if it needs to be forwarded to the upstream ISP server. In view of the foregoing, the rejection based on Birks in view of Krisbergh in view of Elcock stands.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 8-14, and 19-22 are rejected under 35 U.S.C. 102(e) as being unpatentable over Birks et al, US PG Pub # 20030192054, hereinafter Birks, in view of Krisbergh et al, US Patent # 5999970, hereinafter Krisbergh, further in view of Elcock et al, US PG Pub # 20030061604, hereinafter Elcock.

With regard to claim 1, Birks discloses:

A method for expanding the functionality of a content receiver comprising the steps of:

Receiving a command from a downstream content receiver (paragraph 0017; Birks describes a set top box (i.e. content receiver) sending a request to a server upstream); and

Executing the command if the command is not directed to a server further upstream (paragraph 0034; Birks describes a content stream provided to a user upon request, thus executing the request command from the user).

Birks fails to disclose that the content receiver is a set to box receiver requesting access to the internet, determining whether the command is directed to a server further upstream, and wherein executing the command provides access to the Internet to said downstream content receiver. Krisbergh discloses an internet access system through a consumer set top receiver that sends a command to an upstream receiver, the upstream receiver receives the command and sends it to an ISP server further upstream for processing. The ISP then sends the requested information back to the upstream receiver, and then to the consumer set top receiver (Figure 1, item 54 settop converter; item 34 upstream receiver (cable headend) to receive command from settop converter; item 60 ISP to deliver content; column 4, line 45 - column 5, line 25; Krisbergh illustrates and describes a network in which a user can direct a command to an ISP to receive information; the command is sent to the cable head-end, and then forwarded further upstream to the ISP; column 6, lines 22-46; Krisbergh describes determining whether to forward the command to the ISP 60 or if the command can be executed locally, for example the command could be executed locally by

the application server to provide the requested information, or could be executed locally to connect one settop converter to another). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Birks that forwards commands upstream with the feature of Krisbergh that forwards commands upstream to an Internet service provider after determining if the command should be executed by an upstream server. The advantage would have been to provide the customer with Internet service without the need for the customer to acquire the usual equipment such as a computer. The customer could use their TV set to view the Internet, as disclosed by Krisbergh.

Birks, in view of Krisbergh, does not disclose installing a firmware patch in a downstream content receiver that configures said downstream receiver to forward user commands upstream. Elcock discloses a configurable digital appliance in which the appliance can select among several firmware versions depending on the current application. As shown in figure 2, these firmware versions can be stored in memory of the digital appliance (in paragraph [0014]; Elcock discloses that the services applicable to the system are PPV and VOD services typically delivered to user terminal such as a settop decoder as described in paragraph [0015]). In paragraph [0020]; Elcock describes that if the appropriate firmware version is not present in non-volatile memory of the settop device, the terminal can download a more comprehensive firmware to the terminal, which enables enhanced functionality. Accordingly, it would have been

obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Elcock to download an updated firmware version (corresponding to a patch) that allows increased functionality of the settop device to the system of Birks in view of Krisbergh that allows a user to forward commands to an upstream server. The upgraded firmware of Elcock could provide the ability to send new PVR/VOD commands to an upstream server, corresponding to the increased functionality.

With regard to claim 2, Birks in view of Krisbergh in further view of Elcock discloses the method of claim 1, by disclosing a system that forwards commands to a device further upstream, however fails to specifically disclose sending the command if the command is directed to a server further upstream. Krisbergh discloses sending an unexecuted command to a server upstream if the command is directed to the upstream server (column 5, lines 10-25; Krisbergh clearly describes sending an unexecuted command that is received from the user at the head-end that is directed to an ISP further upstream). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Birks with the feature of Krisbergh to send the unexecuted command to the server further upstream so that the proper recipient of the command can execute it properly and deliver the requested information.

With regard to claim 3, Birks, in view of Krisbergh, further in view of Elcock discloses a system that forwards a command received at the head-end upstream receiver (corresponding to an augmentation unit) from a downstream receiver to

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an upstream ISP (corresponding to an augmentation unit further upstream) comprising the step of installing a firmware patch in a downstream content receiver that configures said downstream content receiver to forward user commands upstream (see claim 1 rejection). Krisbergh further discloses the step of directing an unexecuted command to a server further upstream comprising the steps of:

Receiving data packets addressed to an upstream augmentation unit (column 5, lines 10-25; Krisbergh clearly describes depacketizing data received at the upstream augmentation unit);

Generating a modulated carrier signal according to the data packets and conveying the modulated carrier signal to an upstream interface (column 5, lines 10-15; Krisbergh clearly describes forwarding the commands to the source (ISP) by way of a CSU/DSU to modulate the signal).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system by adding this feature taught by Krisbergh to forward the command further upstream to an ISP, with the intent to process internet commands at the ISP and deliver the requested information to the user.

With regard to claim 8, Birks in view of Krisbergh further in view of Elcock discloses the method of claim 3 in that they disclose a method of forwarding a command to an upstream receiver for processing. Birks further discloses



wherein the command received is a record command and the step of executing the command comprises the steps of:

Receiving a content stream from an upstream signal source, and recording the content stream (paragraph 0017, Birks describes that a program can be recorded on request, with the request propagating back through the network to the server).

With regard to claim 9, Birks, in view of Krisbergh, discloses the method of claim 3 in that they disclose a method of forwarding a command to an upstream receiver for processing. Birks further discloses wherein the command received is a play command and the step of executing the command comprises the steps of:

determining what content is requested for play; retrieving the requested content; and directing the retrieved content to the downstream content receiver (paragraph 0042; Birks discloses a "play" command that causes the streaming of the stored program).

With regard to claim 10, Birks, in view of Krisbergh, discloses the method of claim 9 by disclosing a system that receives a play command upstream from the content receiver, wherein the step of directing the retrieved content to the downstream content receiver comprises the steps of: modulating a carrier signal according to the content stream; combining the modulated carrier signal with a multiple carrier signal; and conveying the combined signal to the downstream content receiver (Examiner takes *Official Notice* that using a multiple carrier signal to convey data is well-known and widely used in the art, and would have been obvious to one of ordinary skill in the art at the time of invention to employ).

With regard to claim 11, Birks, in view of Krisbergh, discloses the method of claim 9 in that they disclose directing a retrieved content to a downstream receiver. Birks further discloses wherein the step of directing the retrieved content to the downstream content receiver comprises the steps of:

Modulating the carrier signal according to the content stream; and

Conveying the modulated carrier signal to the downstream content receiver in lieu of a multiple carrier signal (paragraph 0034; Birks clearly discloses modulating the stream to a user upon request via a point-cast technique).

Claim 12 is rejected as applied to claim 1. A content receiver initiation unit that configures the downstream receiver by installing a firmware patch is present in the system of Elcock (see figure 3, process of configuring the receiver with the proper firmware code).

Claims 13-14, and 19-22 are rejected as applied to claims 2-3 and 8-11 respectively.

3. Claims 5-7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birks, in view of Krisbergh, in further view of Elcock, in further view of Hamilton, US Patent # 7305357.

With regard to claim 5, Birks, in view of Krisbergh, in further view of Elcock; discloses the method of claim 4 (see claim 4 rejection). However, they fail to specifically disclose the following:

The firmware patch that causes the processor to:

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Fragment an unexecuted command into one or more data packets;

Generate a modulated carrier signal according to the data packets; and

Convey the modulated carrier signal to an upstream augmentation unit

Hamilton, in his patent, discloses a method of sending customer requests issued in the form of data packets forwarded over Ethernet to a server (column 15, lines 56-60).

A person of ordinary skill in the art at the time of invention would have found it obvious to add this feature to the system taught by Birks, in view of Krisbergh, in further view of Elcock as it is a known and widely used way to transfer data.

With regard to claim 6, Birks in view of Krisbergh in further view of Elcock discloses the method of claim 1 (see claim 1 rejection) by disclosing a system that forwards a command received at an upstream receiver to a server further upstream, however they fail to specifically teach the following feature, which Hamilton does.

Wherein the step of receiving a command from a downstream receiver comprises the steps of: Receiving a data packet from a downstream interface according to a delivery address (column 15, lines 56-60; Hamilton discloses sending the command as a data packet, which inherently has to be addressed properly to reach its destination).

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Associating the data packet with a network message (column 15, lines 53-60, Hamilton describes converting the received commands into suitable instructions)

Directing a network message to a command parser that executes a command contained in the network message (column 15, lines 53-60; Hamilton describes the commands being processed by the media server in order to execute them)

It would have been obvious to one of ordinary skill in the art at the time of invention to add this feature to the system taught by Birks in view of Krisbergh in further view of Elcock in order to receive commands from a downstream receiver in a conventional way as is a standard in the art.

Claim 7 is rejected on the same basis as claim 6. As stated, Hamilton describes the process of receiving a signal from a downstream source, extracting a command from it, and converting this information into packets that are understood by the server.

Claim 16 is the apparatus to perform method claim 5, and is analyzed and rejected accordingly.

Claims 17-18 are the apparatus claims to perform method claims 6-7, and are analyzed and rejected accordingly.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK D. FEATHERSTONE whose telephone number is (571) 270-3750. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F US Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig, can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Featherstone/ - Assistant Examiner

/Andrew Y Koenig/  
Supervisory Patent Examiner, Art Unit 2423